Scenario # 1 **Broadbase with Topsoiling**

Scenario Description: Missouri

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation of a system of broadbase terraces where channel and berm are farmed. Topsoil is stripped and stockpiled during construction. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment include all equipment and labor necessary to excavate, shape, and compact terraces, and stripping and stockpiling topsoil. This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

Before Practice Situation:

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

After Practice Situation:

A system of broadbased terraces measuring 2,500 feet in length, 2.5 height, and 5:1 front and back slopes is installed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. The installed terrace is typically farmed. Associated practices are Underground Outlet (620), Critical Area Planting (342) and Grassed Waterway (412).

Scenario Feature Measure:

Length of Terrace

Scenario Typical Size:

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Excavation, common earth, large equipment,	3750	Cubic Yard	\$1.47	\$5,512.50
Equip./Install.	Stripping and stockpiling, topsoil	4500	Cubic Yard	\$0.83	\$3,735.00
Laban	Chilled Lehen		Harrin	¢21.01	Ć150.55

Tot Unit Cost

\$3.91

Total Cost:

\$9,781.94

Ec Labor Skilled Labor Hour \$31.91 S159.55 1 Mobilization Mobilization, large equipment Each \$374.89 \$374.89

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$2.54	EQIP-HU	\$3.52
EQIP-NOI	\$2.93	EQIP-HUNOI	\$3.52
EQIP-MRBI	\$2.93	EQIP-HUMRBI	\$3.52
EQIP-CCPI	\$2.54	EQIP-HUCCPI	\$3.52

Foot

2500

Scenario # 2 Broadbase no Topsoiling

Scenario Description: Missouri

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation of a system of broadbase terraces where channel and berm are farmed. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

Before Practice Situation:

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

After Practice Situation:

A system of broadbased terraces measuring 2,500 feet in length, 2.5 height, and 5:1 front and back slopes is installed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. The installed terrace is typically farmed. Associated practices are Underground Outlet (620), Critical Area Planting (342) and Grassed Waterway (412).

Scenario Feature Measure:

Length of Terrace

Scenario Typical Size:	2500	Foot	Tot Unit Cost	\$2.42	

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Excavation, common earth, large equipment,	3750	Cubic Yard	\$1.47	\$5,512.50
Labor	Skilled Labor	5	Hour	\$31.91	\$159.55
Mobilization	Mobilization, large equipment	1	Each	\$374.89	\$374.89
D	·			Total Cost:	\$6,046.94

Payment types:

- , -			
_	PayType	Unit Payment	PayType Unit Payment
	EQIP	\$1.81	EQIP-HU \$2.18
	EQIP-NOI	\$1.81	EQIP-HUNOI \$2.18
	EQIP-MRBI	\$1.81	EQIP-HUMRBI \$2.18
	EQIP-CCPI	\$1.81	EQIP-HUCCPI \$2.18

Scenario # 3 Narrowbase <=9% Slopes with topsoiling

2500

Scenario Description: Missouri

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of narrowbase terraces with 2:1 slopes constructed in a field with slopes <=9%. Topsoil is stripped from the borrow area and replaced upon completion of the terrace. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

Before Practice Situation:

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

After Practice Situation:

A system of narrow base terraces with approximately 2:1 front and back slopes measuring 2,500 feet in length and 4.0' height is constructed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

Tot Unit Cost

\$3.47

Total Cost:

\$8,679.44

Scenario Feature Measure:

Length of Terrace

Scenario Typical Size:

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Stripping and stockpiling, topsoil	4500	Cubic Yard	\$0.83	\$3,735.00
Equip./Install.	Excavation, common earth, large equipment,	3000	Cubic Yard	\$1.47	\$4,410.00
Labor	Skilled Labor	5	Hour	\$31.91	\$159.55
Mobilization	Mobilization, large equipment	1	Each	\$374.89	\$374.89

Payment types:

u y	iliciit types.		
	PayType	Unit Payment	PayType Unit Payment
	EQIP	\$2.26	EQIP-HU \$3.12
	EQIP-NOI	\$2.60	EQIP-HUNOI \$3.12
	EQIP-MRBI	\$2.60	EQIP-HUMRBI \$3.12
	EQIP-CCPI	\$2.26	EQIP-HUCCPI \$3.12

Foot

Scenario # 4 Narrowbase <= 9% Slopes, no topsoiling

Scenario Description: Missouri

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of narrowbase terraces with 2:1 slopes constructed in a field with slopes <=9%. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

Before Practice Situation:

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

After Practice Situation:

A system of narrow base terraces with approximately 2:1 front and back slopes measuring 2,500 feet in length and 4.0 feet height is constructed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

Scenario Feature Measure:

Length of Terrace

Scenario Typical Size:	2500	Foot	Tot Unit Cost	\$1.98	

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Excavation, common earth, large equipment,	3000	Cubic Yard	\$1.47	\$4,410.00
Labor	Skilled Labor	5	Hour	\$31.91	\$159.55
Mobilization	Mobilization, large equipment	1	Each	\$374.89	\$374.89

Total Cost:

\$4,944.44

Payment types:

ıyıı	ieiit types.			
	PayType	Unit Payment	PayType Unit Payment	
	EQIP	\$1.48	EQIP-HU \$1.78	
	EQIP-NOI	\$1.48	EQIP-HUNOI \$1.78	
	EQIP-MRBI	\$1.48	EQIP-HUMRBI \$1.78	
	EQIP-CCPI	\$1.48	EQIP-HUCCPI \$1.78	

Scenario # 5 Narrowbase >9% Slopes with Topsoiling

2500

Mobilization, large equipment

Scenario Description: Missouri

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of narrowbase terraces with 2:1 slopes constructed in a field with slopes >9%. Topsoil is stripped from the borrow area and replaced upon completion of the terrace. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

Before Practice Situation:

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

After Practice Situation:

A system of narrow base terraces with approximately 2:1 front and back slopes measuring 2,500 feet in length and 4.4' height is constructed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

Tot Unit Cost

\$3.77

\$374.89

Total Cost:

\$374.89

\$9,414.44

Each

Scenario Feature Measure:

Length of Terrace

Scenario Typical Size:

ost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Stripping and stockpiling, topsoil	4500	Cubic Yard	\$0.83	\$3,735.00
Equip./Install.	Excavation, common earth, large equipment,	3500	Cubic Yard	\$1.47	\$5,145.00
Labor	Skilled Labor	5	Hour	\$31.91	\$159.55

1

Payment types:

Mobilization

^ y	iliciic cypcs.		
	PayType	Unit Payment	PayType Unit Payment
	EQIP	\$2.45	EQIP-HU \$3.39
	EQIP-NOI	\$2.82	EQIP-HUNOI \$3.39
	EQIP-MRBI	\$2.82	EQIP-HUMRBI \$3.39
	EQIP-CCPI	\$2.45	EQIP-HUCCPI \$3.39

Foot

Scenario # 6 Narrowbase >9% Slopes, no topsoiling

Scenario Description: Missouri

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of narrowbase terraces with 2:1 slopes constructed in a field with slopes >9%. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices. Payment includes all equipment and labor necessary to excavate, shape, and compact terraces. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

Before Practice Situation:

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

After Practice Situation:

A system of narrow base terraces with approximately 2:1 front and back slopes measuring 2,500 feet in length and 4.4' height is constructed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

Scenario Feature Measure:

Length of Terrace

Scenario Typical Size:	2500	Foot	Tot Unit Cost	\$2.27	
					4

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Excavation, common earth, large equipment,	3500	Cubic Yard	\$1.47	\$5,145.00
Labor	Skilled Labor	5	Hour	\$31.91	\$159.55
Mobilization	Mobilization, large equipment	1	Each	\$374.89	\$374.89
·					

Total Cost:

\$5,679.44

Payment types:

u y	ment types.		
	PayType	Unit Payment	PayType Unit Payment
	EQIP	\$1.70	EQIP-HU \$2.04
	EQIP-NOI	\$1.70	EQIP-HUNOI \$2.04
	EQIP-MRBI	\$1.70	EQIP-HUMRBI \$2.04
	EQIP-CCPI	\$1.70	EQIP-HUCCPI \$2.04

Scenario # 7 Steepbacked with Topsoiling

Scenario Description: Missouri

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of terraces where each terrace is constructed with one relatively flat (5:1) slope and one steep (2:1) slope constructed in a field. Topsoil is stripped from the borrow area and replaced upon completion of the terrace. The steep slopes are established to permanent vegetation and the flatter slopes are farmed. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices Payment includes all equipment and labor necessary to excavate, shape, and compact terraces, and stripping and stockpiling topsoil. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

Before Practice Situation:

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

After Practice Situation:

A system of terraces with one steep (2:1) and one flat (5:1) slope measuring 2,500 feet in length and 3.2' height is installed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

Tot Unit Cost

\$3.62

Total Cost:

\$9,046.94

Scenario Feature Measure:

Length of Terrace

Scenario Typical Size:

ost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Excavation, common earth, large equipment,	3250	Cubic Yard	\$1.47	\$4,777.50
Fauin /Install	Strinning and stockniling tonsoil	4500	Cuhic Yard	\$0.83	\$3 735 00

Equip./Install.Stripping and stockpiling, topsoil4500Cubic Yard\$0.83\$3,735.00LaborSkilled Labor5Hour\$31.91\$159.55MobilizationMobilization, large equipment1Each\$374.89\$374.89

Payment types:

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$2.35	EQIP-HU	\$3.26
EQIP-NOI	\$2.71	EQIP-HUNOI	\$3.26
EQIP-MRBI	\$2.71	EQIP-HUMRBI	\$3.26
EQIP-CCPI	\$2.35	EQIP-HUCCPI	\$3.26

Foot

2500

Scenario # 8 Steepbacked no topsoiling

Scenario Description: Missouri

An earthen embankment with channel constructed across the field slope as part of a system to shorten slope lengths and reduce sheet, rill, and gully erosion in a cropped field. Scenario is for the installation is a system of terraces where each terrace is constructed with one relatively flat (5:1) slope and one steep (2:1) slope constructed in a field. The steep slopes are established to permanent vegetation and the flatter slopes are farmed. A stable outlet is provided in the form of a Grassed Waterway, other open outlet or Underground Outlet through associated practices Payment includes all equipment and labor necessary to excavate, shape, and compact terraces, and stripping and stockpiling topsoil. For the establishment of permanent vegetation on the terraces use associated practice Critical Area Planting (342). This practice addresses Concentrated Flow Erosion and Excessive Sediment in surface waters.

Before Practice Situation:

Long slope lengths contribute to excessive sedimentation and soil erosion in cropped fields as a result of gully, rill, and sheet erosion. The excessive erosion may lead to deterioration of receiving waters due to excessive sedimentation and nutrient transport.

After Practice Situation:

A system of terraces with one steep (2:1) and one flat (5:1) slope measuring 2,500 feet in length and 3.2' height is installed with spacing designed to intercept flow of water and shorten slope length to reduce erosion to acceptable levels. Work is done with dozer, scraper, or road grader. Associated practices are Critical Area Planting (342), Grassed Waterway (412), and Underground Outlet (620).

Tot Unit Cost

\$2.12

Total Cost:

\$5,311.94

Scenario Feature Measure:

Length of Terrace

Scenario Typical Size:

				<u> </u>		
ost Category	Component Name	Quantity	Unit	Unit Cost	Cost	
Equip./Install.	Excavation, common earth, large equipment,	3250	Cubic Yard	\$1.47	\$4,777.50	
				1		

Equip./Install.Excavation, common earth, large equipment,3250Cubic Yard\$1.47\$4,777.50LaborSkilled Labor5Hour\$31.91\$159.55MobilizationMobilization, large equipment1Each\$374.89

Payment types:

_	PayType	Unit Payment	PayType	Unit Payment
	EQIP	\$1.59	EQIP-HU	\$1.91
	EQIP-NOI	\$1.59	EQIP-HUNOI	\$1.91
	EQIP-MRBI	\$1.59	EQIP-HUMRBI	\$1.91
	EQIP-CCPI	\$1.59	EQIP-HUCCPI	\$1.91

Foot

2500